# PATENT COOPERATION TREATY

# **PCT**

# TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference  LSI-P2   |   |                        |                           | FOR FURTHER ACTION  |  |                            | See Form PCT/IPEA/416                              |   |
|---|---|------------------------|---------------------------|---|--|----------------------------|--|---|
| International application No.                   |   |                        |                           | International filing date (day/month/year)  |  | h/year)                    | Priority date (day/month/year)                     | - |
| PCT/JP2005/000620                               |   |                        | 13.01.2005                |   |  | 13.01.2004                 |  |   |
| Internati                                       | onal Pat  | ent Classific          | ation (IPC) or natio      | onal classification and I   | PC   |                            |  | - |
| H04B1/59 (2006. 01), H04B5/0                    |   |                        |                           | H04B5/02 (  | 2006.  | 01),                       | G01S13/74 (2006. 01)                               |   |
| Applicar  | nt  |                        |                           |   |  |                            |  | _ |
| LSI   | JAF   | AN CO                  | ., LTD.                   |   |  |                            |  |   |
|   |   |                        |                           |   |  |                            |  |   |
| 1.  | <ol> <li>This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> </ol>                     |                        |                           |   | s International Preliminary Examining Authority  |                            |  |   |
| 2.  | This R  | EPORT cons             | sists of a total of       | 5   | she  | ets, includi               | ng this cover sheet.                               |   |
| 3.  | This re   | eport is also a        | accompanied by AN         | NNEXES, comprising:   |  |                            |  |   |
|   | a. 🔀  | (sent to               | the applicant and i       | to the International Bui  | eau) a total   | of <b>6</b>                | sheets, as follows:                                |   |
|   | sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). |                        |                           |   |  |                            |  |   |
|   | sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental                    |                        |                           |   |  |                            |  |   |
| Box.  |   |                        | Puragu anhi) a tatal af ( | indicata tym  | ماسييس المسم   | an of algebraic comicn(s)) |  |   |
|   | b   | _ (sem to              | ine imericatonca L        | sureuu oniy) a totai oi (   | .ndreate typ   | e and numb                 | er of electronic carrier(s))                       |   |
| related thereto, in computer readable form only |   | readable form only, as | indicated i               | n the Suppl   | , containing a sequence listing and/or tables lemental Box Relating to Sequence Listing (see |                            |  |   |
|   |   |                        |                           | rative Instructions).   |  |                            |  |   |
| 4.  | This re   | port contains          | s indications relatin     | ng to the following item  | s:   |                            |  |   |
|   | $\boxtimes$   | Box No. I              | Basis of the              | report  |  |                            |  |   |
|   |   | Box No. II             | Priority                  |   |  |                            |  |   |
|   |   | Box No. III            | I Non-establis            | shment of opinion with regard to novelty, inventive step and industrial applicability |  |                            |  |   |
|   |   | Box No. IV             | Lack of unit              | y of invention  |  |                            |  |   |
|   | $\boxtimes$   | Box No. V              |                           | atement under Article 3<br>explanations supportin                                     |  |                            | velty, inventive step or industrial applicability; |   |
|   |   | Box No. VI             | I Certain docu            | ments cited   |  |                            |  |   |
|   |   | Box No. VI             | II Certain defe           | cts in the international  | pplication   |                            |  |   |
|   | $\boxtimes$   | Box No. VI             | III Certain obse          | rvations on the internat  | ional applic   | ation                      |  |   |
| Date of submission of the demand                |   |                        |                           | Date of com   | pletion of t   | his report                 | =  |   |
|   |   |                        |                           |   |  |                            |  |   |
| Name and mailing address of the IPEA/JP         |   |                        |                           |   | Authorized   | officer                    |  | _ |
|   |   |                        |                           |   |  |                            |  |   |
|   |   |                        |                           |   |  |                            |  |   |
| Faccimile No.                                   |   |                        |                           |   |  |                            |  |   |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/000620

| Box | No. I   | Basis of the report  |                                    |   |  |  |  |
|-----|---|--|------------------------------------|---|--|--|--|
| 1.  |   | n regard to the language, this report is based on the internatio cated under this item.                                | nal application in the language in | which it was filed, unless otherwise    |  |  |  |
|     | This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:  international search (Rule 12.3 and 23.1(b)) |  |                                    |   |  |  |  |
|     |   | publication of the international application (Rule 12.4  | )                                  |   |  |  |  |
|     |   | international preliminary examination (Rule 55.2 and/  |                                    |   |  |  |  |
| 2.  |   |  |                                    |   |  |  |  |
|     |   | the description:   |                                    |   |  |  |  |
|     |   | pages1,3-5,8-21  |                                    | as originally filed/furnished           |  |  |  |
|     |   | pages* 22  | received by this Authority on      | 21.06.2005                              |  |  |  |
|     | _   | pages* 2,6,7   | received by this Authority on      | 16.03.2006                              |  |  |  |
|     | $\boxtimes$   | the claims:  |                                    |   |  |  |  |
|     |   | nos. <b>2-4</b>  |                                    | as originally filed/furnished           |  |  |  |
|     |   | nos.*  | as amended (togethe                | er with any statement) under Article 19 |  |  |  |
|     |   | nos.* _ 1,5-7  | received by this Authority on      | 16.03.2006                              |  |  |  |
|     |   | nos.*  | received by this Authority on      |   |  |  |  |
|     | $\boxtimes$   | the drawings:  |                                    |   |  |  |  |
|     |   | sheets fig. 1-12   |                                    | as originally filed/furnished           |  |  |  |
|     |   | sheets*  |                                    |   |  |  |  |
|     |   | sheets*  | received by this Authority on      |   |  |  |  |
|     |   | a sequence listing and/or any related table(s) – see Supplem   |                                    |   |  |  |  |
| 3.  |   | The amendments have resulted in the cancellation of:   |                                    |   |  |  |  |
|     |   | the description, pages   |                                    |   |  |  |  |
|     |   | the claims, nos.   |                                    |   |  |  |  |
|     |   | the drawings, sheets/figs  |                                    |   |  |  |  |
|     |   | the sequence listing (specify):  |                                    |   |  |  |  |
|     |   | any table(s) related to sequence listing (specify):  |                                    |   |  |  |  |
| 4.  |   | This report has been established as if (some of) the amend they have been considered to go beyond the disclosure as fi |                                    |   |  |  |  |
|     |   | the description, pages   |                                    |   |  |  |  |
|     |   | the claims, nos.   |                                    |   |  |  |  |
|     |   | the drawings, sheets/figs  |                                    |   |  |  |  |
|     |   | the sequence listing (specify):  |                                    |   |  |  |  |
|     |   | any table(s) related to sequence listing (specify):  |                                    |   |  |  |  |
| *   | If ite  | em 4 applies, some or all of those sheets may be marked "sup   |                                    |   |  |  |  |

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International application No.
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| Вох |                     | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |      |       |  |  |  |  |
|-----|---------------------|---|------|-------|--|--|--|--|
| 1.  | Statement           |   |      |       |  |  |  |  |
|     | Novelty (N)         | Claims  | 1-7  | YES   |  |  |  |  |
|     |                     | Claims  |      | NO    |  |  |  |  |
|     | Inventive step (IS) | Claims  | _1-7 | YES   |  |  |  |  |
|     |                     | Claims  |      | NO    |  |  |  |  |
|     | Industrial applicab | oility (IA) Claims  | 1-7  | YES   |  |  |  |  |
|     |                     | Claims  |      | NO NO |  |  |  |  |
|     |                     |   |      |       |  |  |  |  |

#### 2. Citations and explanations (Rule 70.7)

Document 1 (JP 2003-158470 A (Lucent Technologies Inc.), 30 May 2003, paragraph [0040] & US 5952922 A1 & EP 851239 A1 & CA 2219074 A1) indicates that "herein, the location determination process is a software-based process that is capable of determining the location of a tag based on the signal strength of the acknowledgement message that is issued in response to the execution of the location determination process by the interrogator."

Meanwhile, document 2 (WO 2002/103645 A2 (RF Code, Inc.), 27 December 2002, abstract & US 2003/30568 A1 & EP 1410353 A & JP 2005-500516 A & CA 2450727 A) indicates that "within the location detection system, the low-frequency transmitter transmits location identification information such as a transmitter ID to a tag in the vicinity of the transmission, whereafter the tag relays the transmitter ID by means of a higher frequency transmission, which is transmitted from the tag to the receiver."

#### Claims 1 to 7

The documents that are cited in the international search report do not disclose or suggest the transmission means whereby probe signals are transmitted to the other

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| Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
|---|
| IC tags, or the second response means whereby the   |
| information (Y) from the transmission-source IC tag,  |
| which was stored in the memory, is returned to the  |
| interrogator.   |
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#### Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

- (1) In fig. 4, it is unclear what is being represented by the reference sign "(Xa)," which appears beside the dotted line that represents the probe signal.
- (2) Claim 1 stipulates that the "information (Y) from the other IC tag, which is the transmission source specified by the interrogator, is stored in the memory." In order to store the information (Y) in the memory, it is necessary to first acquire said information (Y); however, neither the signal from which the information (Y) is acquired nor the means by which the IC tag acquires the information (Y) is apparent from the disclosure in claim 1.
- (3) Claim 7 stipulates that the "information (Y) from the other IC tag, which is the transmission source specified by the interrogator, is stored in the memory." In order to store the information (Y) in the memory, it is necessary to first acquire said information (Y); however, neither the signal from which the information (Y) is acquired nor the step in which the IC tag acquires the information (Y) is apparent from the disclosure in claim 7.